

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

Work Order ID 133391

Monday, June 08, 2015 3:59:58 PM

133391

Page 2

Item ID: D135-692-011

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Bearpaw

Start Date: 5/31/15

Start Qty: 2.00

2

Cust Item ID:

Required Date: 6/08/15

Req'd Qty: 2.00

2

Customer:

Reference:

Run Start

NR1

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

NR2

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

170

0.00

170

Packaging

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D135-692-011

Location: FC 013

PPP Rev: _____

DAS
02
9-89

JUL 07 2015

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.00

Quality Control

ML5 JUL 08 2015

ML5 JUL 08 2015

DQA: _____ Date: _____



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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
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				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

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Page 1

Work Order ID: 133391

133391

Parent Item: D135-692-011

D135-692-011

Parent Item Name: Bearpaw

Start Date: 5/31/15

Required Date: 6/08/15

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:C04.02.17Blank size changed, Tolerance added Step
3KJ/JLM IPP REV:E AS PER DSI
9592/9587 REV A JLM VERIFIED BY:EC
IPP Rev:D 08-04-16 Added Step 2 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

AN4-13A		Purchased	No				Each	452.0000	8	16			
---------	--	-----------	----	--	--	--	------	----------	---	----	--	--	--

AN4-13A

Bolt

DAS
02
9-89

Location

Loc Qty

Loc Code

DAS
27
9-89

FG	20	
122808	20	
ST325A	408	
m131957	200	
m132317	208	
ST344	24	
131677	24	

16

J.A.

D2182B		Manufactured	No				f	530.7680	2	4			
--------	--	--------------	----	--	--	--	---	----------	---	---	--	--	--

D2182B

Rubber Cushion - Black (\$Per Foot)

**

Location

Loc Qty

Loc Code

ST411	180.768	
108914	4.5	
115189	21.5	
128976	154.768	
st640	350	
130427	350	

4

J.A.

DAS
27
9-89
JUL 06 2015

DAS
02
9-89

4 X 6" per Kit

DQA: _____ Date: _____



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Page 2

Work Order ID: 133391

133391

Parent Item: D135-692-011

D135-692-011

Parent Item Name: Bearpaw

Start Date: 5/31/15

Required Date: 6/08/15

Start Qty: 2.00

Required Qty: 2.00

D2274

Manufactured No

160

Each

463.0000

8

16

D2274

Radius Block

DAS
27
9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

FG

12

86855

12

ST006

316

102156

2

106191

46

108466

12

127579

208

128474

36

129934

12

ST012a

135

131031

135

15

J.A.

D2519

Manufactured No

160

Each

66.0000

4

8

D2519

Clamp

DAS
27
9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

ST542

66

101510

6

129515

8

132424

50

99606

2

5

J.A

3

D2529

Manufactured No

160

Each

430.0000

8

16

D2529

Washer

DAS
02
9-89

Location

Loc Qty

Loc Code

ST007

416

131945

416

ST008

14

128950

14

16 J.A

JUL 06 2015

DAS
27
9-89

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Shop Packet Print

Page 2

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Pieclist Print

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Page 3

Work Order ID: 133391

133391

Parent Item: D135-692-011

D135-692-011

Parent Item Name: Bearpaw

Start Date: 5/31/15

Required Date: 6/08/15

Start Qty: 2.00

Required Qty: 2.00

D3049-1

Manufactured No

160

Each

0.0000

2

4

JUL 06 2015

DAS

D3049-1

***DAS**

Bearpaw

02

MS21042L4

9-89

Purchased No

160

Each

5,121.000

8

16

MS21042L4

Locknut

DAS

02

9-89

Location

Loc Qty

Loc Code

FP001

26

m124231

26

GA

208

m127813

208

ST260a

4062

m130799

56

m131803

6

m132262

1000

m132382

3000

ST305

825

m128300

8

m130388

7

m130922

97

m131618

12

m132123

701

16 J.A.

DAS

27

9-89

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Work Order ID: 133391

133391

Parent Item: D135-692-011

D135-692-011

Parent Item Name: Bearpaw

Start Date: 5/31/15

Required Date: 6/08/15

Start Qty: 2.00

Required Qty: 2.00

NAS1149D0463J

Purchased

No

160

Each

4,707.000

8

16

NAS1149D0463J

WASHER

**DAS
02
9-89**

Location

Loc Qty

Loc Code

GA

41

M129390

41

ST260a

1305

M132317

1305

ST269

3361

M129682

86

M130799

371

M132035

2904

**DAS
27
9-89**

QS100-M24S

Purchased

No

160

Each

28.0000

4

8

QS100-M24S

Clamp

**DAS
02
9-89**

Location

Loc Qty

Loc Code

ST544

28

m132342

28

8 JA

JUL 06 2015

**DAS
27
9-89**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

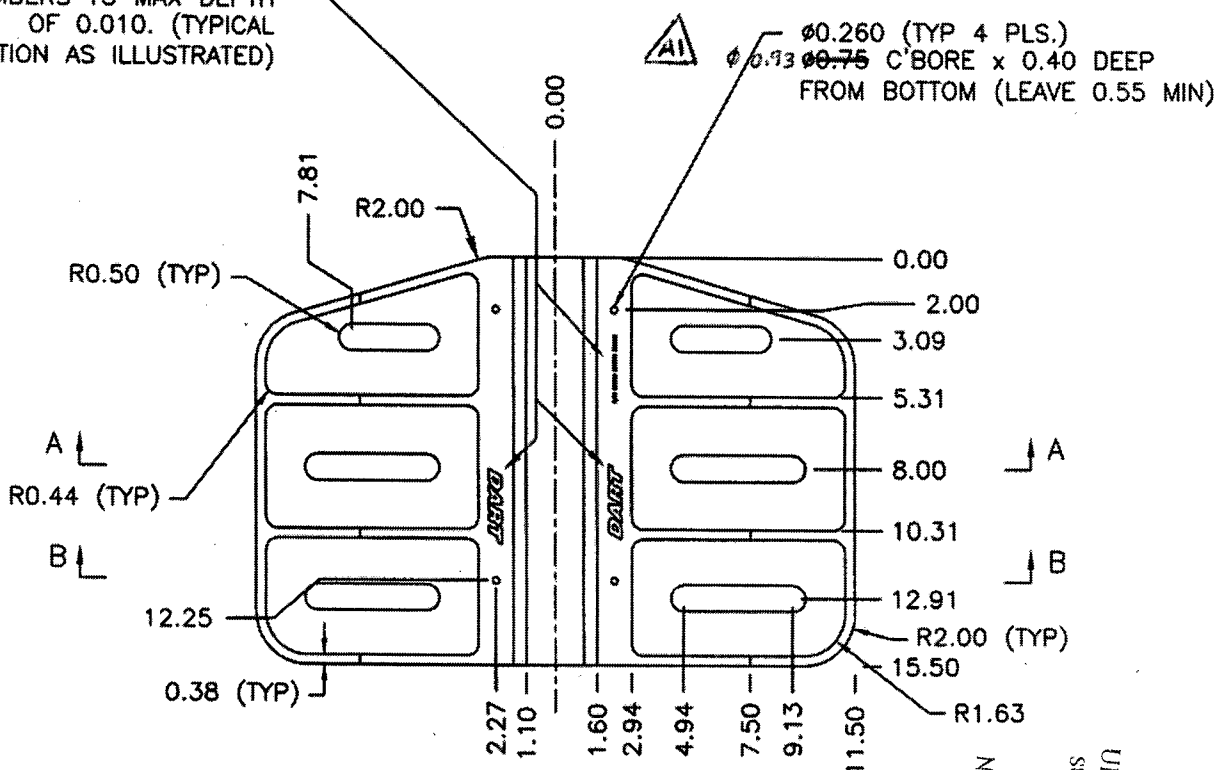
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					



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CHECKED #	APPROVED #	DRAWING NO. D3049	REV. A SHEET 1 OF 2
DATE 01 10.18		TITLE BEARPAW	SCALE 1:1
A	01.10.18	NEW ISSUE	
AI	# 03.01.13	0.93 WAS 0.75	

RELEASED
01.10.24

ENGRAVE DART LOGO TO
MAX DEPTH OF 0.012.
ENGRAVE PART AND BATCH
NUMBERS TO MAX DEPTH
OF 0.010. (TYPICAL
LOCATION AS ILLUSTRATED)



D3049-1 BEARPAW

NOTES:

- 1) BEARPAW IS SYMMETRIC ABOUT CENTER LINE
- 2) MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689, 1.00" THICK (MACHINE TO 0.950)

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15-06-09

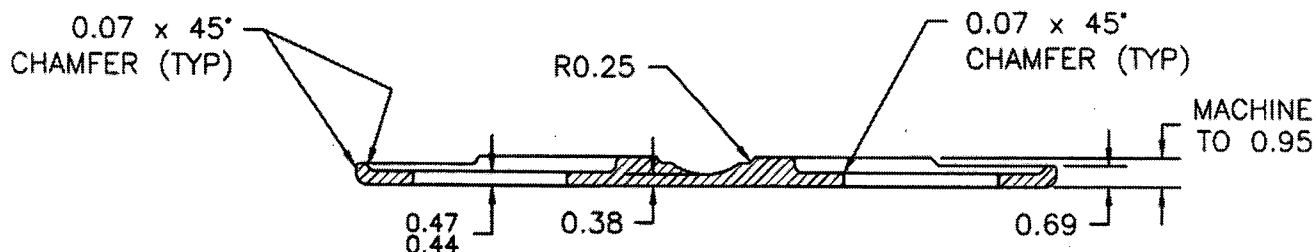
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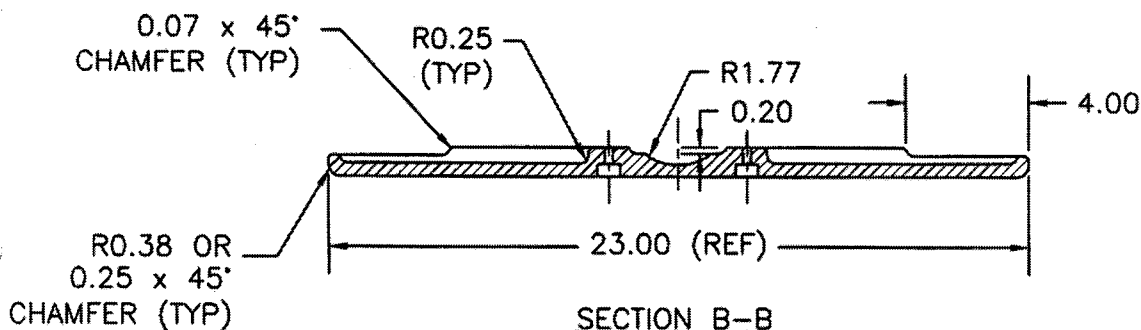


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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3049	REV. A SHEET 2 OF 2
DATE 01.10.18		TITLE BEARPAW	SCALE 1:6

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SECTION A-A



SECTION B-B

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5. Additional AN960JD416 washers may be installed under the nuts to ensure 1.5-4 threads in safety on the bolts. Although not generally necessary, it is also acceptable to replace the AN4-15A bolts with longer or shorter AN4 bolts, if required.
6. Lower the aircraft

4. WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D135-692-011 Bearpaw Installation on model EC135 aircraft	11.8 lb 5.36 kg	0.0 in 0.0 m	0.0 lb-kg 0.0 m-kg	199.7 in 5.07 m	2356 in-lb 27.2 m-kg

5. PARTS LIST

Qty	Part Number	Description
X	D135-692-011	BEARPAW INSTALLATION
4	D2182B060	RUBBER CUSHION
8	D2274	RADIUS BLOCK
2	D3049-1	BEARPAW
8	D2529	WASHER
4	D2519	CLAMP
8	AN4-15A	BOLT
8	AN960JD416	WASHERS
8	MS21042L4	NUT (OR MS21042-4)
4	QS100M24S	CLAMP

REFERENCE ONLY

DAS
02
9-89

DART SERVICE INSTRUCTION

TO AMEND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D135-692 REV. 0

REF. FAA STC: SR01042SE

REF. TCCA LETTER OF ACCEPTANCE: 120S-GA-08-52

REF. UK STC: AAN #28700

PURPOSE:

THE PURPOSE OF THIS SERVICE INSTRUCTION IS TO CORRECT A DISCREPANCY IN SECTION 32.4 OF ICA-D135-692 REV. 0.

CHANGE:

FOR D135-692-011 BEARPAW INSTALLATION, THE D2519 CLAMP QTY(8) SHOWN IN THE PARTS LISTS IS UPDATED AS INDICATED BELOW:

32.4 PARTS LIST

Qty	Part Number	Description
X	D135-692-011	BEARPAW INSTALLATION

IS:

4	D2519	CLAMP
---	-------	-------

WAS:

8	D2519	CLAMP
---	-------	-------

A	NEW ISSUE	(REF CAR11-60)	MB	12.01.18
REV.		DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE USA, INC KENT, WA		
DRAWN				
CHECKED		DRAWING NO.	REV. A	
MFG. APPR.		DSI 9592	SHEET 1 OF 1	
APPROVED		TITLE	SCALE	
DE APPR.		PARTS LIST CORRECTION	NTS	
DATE	12.01.18	COPYRIGHT © 2012 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.		

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D135-692 REV. A AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D135-692 REV. 0
REF. FAA STC: SR01042SE

REFERENCE ONLY
DAS
02
9-89

PURPOSE:

The purpose of this service instruction is to replace the AN4-15A Bolt with a shorter AN4-13A Bolt to facilitate installation.

CHANGE:

**5. PARTS LIST (IIN-D135-692)
32.4 PARTS LIST (ICA-D135-692)**

Qty	Part Number	Description
X	D135-692-011	BEARPAW INSTALLATION

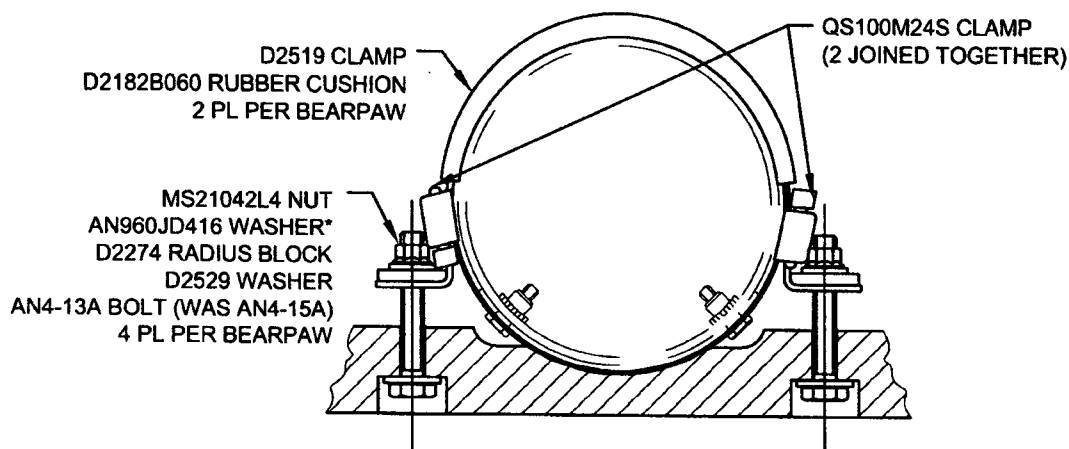
IS:

8	AN4-13A	BOLT
---	---------	------

WAS:

8	AN4-15A	BOLT
---	---------	------

Figure 2 of IIN-D135-692 and Figure 32-2 of ICA-D135-692 are amended as follows:



**Figure 2 - Bearpaw Installation (IIN-D135-692)
Figure 32-2: Bearpaw Installation (ICA-D135-692)**

A	NEW ISSUE	(REF: PAR10-56)	MB	11.12.13
REV.	DESCRIPTION		BY	DATE
DESIGN	DART AEROSPACE USA, INC KENT, WA		REV. A SHEET 1 OF 1	
DRAWN				
CHECKED	DRAWING NO.		SCALE NTS	
MFG. APPR.	DSI 9587			
APPROVED	TITLE		SCALE NTS	
DE APPR.	BOLT CHANGE			
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